

Audit



Report

OFFICE OF THE INSPECTOR GENERAL

**INVENTORY RECORD ACCURACY AND
MANAGEMENT CONTROLS AT THE DEFENSE
LOGISTICS AGENCY DISTRIBUTION DEPOTS**

Report No. 98-019

November 10, 1997

DISTRIBUTION STATEMENT A
Approved for Public Release
Distribution Unlimited

19991007 073

Department of Defense

DTIC QUALITY INSPECTED 4

AOI 00-01-2485

Additional Copies

To obtain additional copies of this audit report, contact the Secondary Reports Distribution Unit of the Analysis, Planning, and Technical Support Directorate at (703) 604-8937 (DSN 664-8937) or FAX (703) 604-8932.

Suggestions for Future Audits

To suggest ideas for or to request future audits, contact the Planning and Coordination Branch of the Analysis, Planning, and Technical Support Directorate at (703) 604-8939 (DSN 664-8939) or FAX (703) 604-8932. Ideas and requests can also be mailed to:

OAIG-AUD (ATTN: APTS Audit Suggestions)
Inspector General, Department of Defense
400 Army Navy Drive (Room 801)
Arlington, Virginia 22202-2884

Defense Hotline

To report fraud, waste, or abuse, contact the Defense Hotline by calling (800) 424-9098; by sending an electronic message to Hotline@DODIG.OSD.MIL; or by writing the Defense Hotline, The Pentagon, Washington, D.C. 20301-1900. The identity of each writer and caller is fully protected.

Acronyms

AMCL	Approved Military Standard Transaction Reporting and Accounting Procedures Change Letter
CFO	Chief Financial Officers
DBOF	Defense Business Operations Fund
DLA	Defense Logistics Agency
DSS	Distribution Standard System
GAO	General Accounting Office
ICP	Inventory Control Point
MILSTRAP	Military Standard Transaction Reporting and Accounting Procedures
NSN	National Stock Number



**INSPECTOR GENERAL
DEPARTMENT OF DEFENSE
400 ARMY NAVY DRIVE
ARLINGTON, VIRGINIA 22202-2884**



November 10, 1997

**MEMORANDUM FOR DEPUTY UNDER SECRETARY OF DEFENSE
(LOGISTICS)
DIRECTOR, DEFENSE LOGISTICS AGENCY**

**SUBJECT: Audit Report on Inventory Record Accuracy and Management Controls at
the Defense Logistics Agency Distribution Depots (Report No. 98-019)**

We are providing this report for information and use. This report is the third in a series of reports about the FY 1996 Defense Business Operations Fund inventory accounts. We considered management comments on a draft of this report in preparing the final report.

Comments on the draft of this report conformed to the requirements of DoD Directive 7650.3 and left no unresolved issues. Therefore, no additional comments are required.

We appreciate the courtesies extended to the audit staff. Questions on the audit should be directed to Mr. James Kornides, Audit Program Director, or Mr. Tim Soltis, Audit Project Manager, at (614) 751-1400 (e-mail JKornides@DODIG.OSD.MIL or TSoltis@DODIG.OSD.MIL). See Appendix E for the report distribution. The audit team members are listed on the inside back cover.

Robert J. Lieberman
Assistant Inspector General
for Auditing

Office of the Inspector General, DoD

Report No. 98-019
(Project No. 5FJ-2018.02)

November 10, 1997

Inventory Record Accuracy and Management Controls at the Defense Logistics Agency Distribution Depots

Executive Summary

Introduction. We identified issues pertaining to inventory record accuracy and management controls at Defense Logistics Agency distribution depots during our audit of inventory accounts contained in the FY 1996 Defense Business Operations Fund financial statements. Financial statement audits are required by the Chief Financial Officers Act of 1990 (Public Law 101-576, November 15, 1990), as amended by the Federal Financial Management Act of 1994 (Public Law 103-356, October 13, 1994). This report is the third in a series of reports pertaining to the inventory accounts of the Defense Business Operations Fund. Appendix B summarizes our two prior audit reports and related work done by the Army Audit Agency, the Naval Audit Service, the Air Force Audit Agency, and the General Accounting Office. A subsequent report discusses the overall accuracy of the DoD-wide Defense Business Operations Fund inventory.

DoD reported \$57.1 billion of Defense Business Operations Fund inventory on the FY 1996 financial statements. Approximately 75 percent of the inventory was physically located at 23 distribution depots managed by the Defense Logistics Agency. In addition to supporting the financial statements, accurate inventory records are needed to make effective supply management and budget decisions. Inventory accuracy is also critical to achieving DoD goals of total asset visibility and reducing inventory levels significantly, while maintaining a high level of customer support. The accuracy of distribution depot records depends on effective management controls, which require the taking of physical inventories, measuring the record accuracy rate against an established standard, and identifying and correcting the underlying causes of record discrepancies.

In December 1996, the Under Secretary of Defense (Comptroller) announced that the Defense Business Operations Fund would be realigned into several separate working capital funds. This realignment does not affect the matters discussed in this report. However, the realignment will affect the design of the annual statistical sample discussed in Finding A.

Audit Objectives. The overall audit objective was to determine whether the inventory accounts of the FY 1996 Defense Business Operations Fund financial statements were presented fairly in accordance with the "other comprehensive basis of accounting" described in Office of Management and Budget Bulletin No. 94-01, "Form and Content of Agency Financial Statements," November 16, 1993. For this part of the audit, we evaluated inventory record accuracy and management controls at the Defense Logistics Agency distribution depots. We also evaluated those segments of the Defense Logistics Agency's management control program applicable to inventory record accuracy.

Audit Results. Inventory record accuracy and management controls at the Defense Logistics Agency distribution depots were not adequate. Although the Defense Logistics Agency developed a plan to assess the overall accuracy of its distribution depot records for logistics purposes, the plan did not meet the Chief Financial Officers Act requirements to assess the dollar value accuracy of that portion of the \$57.1 billion of Defense Business Operations Fund inventory stored at the 23 distribution depots. Also, the Defense Logistics Agency did not have the necessary controls in place to ensure that all scheduled inventories were completed, data transferred from legacy systems to the Distribution Standard System were accurate, and standard distribution operating procedures were established. In addition, the Deputy Under Secretary of Defense (Logistics) did not establish a standard against which the Defense Logistics Agency could measure inventory record accuracy at its distribution depots. As a result, the Defense Logistics Agency could not accurately measure inventory accuracy for financial statement purposes and distribution depot management controls could not be relied on to provide complete and accurate inventory data (Finding A).

Distribution depot procedures to research the causes of inventory discrepancies, while effective at correcting the record balances of the items counted, did not identify the underlying causes of the record discrepancies. In addition, some depots did not perform required causative research. As a result, causative research continued to command significant resources but delivered little benefit to improve distribution operations (Finding B).

See Appendix A for details on the management control program.

Summary of Recommendations. We recommended that the Deputy Under Secretary of Defense (Logistics) establish a standard for measuring inventory record accuracy. We also recommend that the Director, Defense Logistics Agency, establish a tracking process to ensure that all inventories are conducted as planned, ensure the accuracy of data transferred from legacy systems to the Distribution Standard System, implement standard operating procedures at all depots, and train depot personnel to use the Distribution Standard System. We also recommended the Director, Defense Logistics Agency, revise causative research procedures to utilize computer-assisted techniques that focus research efforts on depots and commodities with large variances.

Management Comments. The Deputy Under Secretary of Defense (Logistics) concurred with our recommendation, stating that the Joint Physical Inventory Work Group will be tasked to develop an inventory accuracy standard by October 31, 1997. The Deputy Director, Defense Logistics Agency, concurred with all but one recommendation, agreeing to establish a tracking process to improve inventory management and ensure inventory accuracy. The Deputy Director partially concurred with the recommendation to revise procedures for researching inventory discrepancies, stating that analysis at the national stock number and storage location levels would be more useful than focusing research efforts on depots and commodities with large variances. See Part I for a summary of the management comments and Part III for the complete text of the management comments.

Audit Response. Management comments were responsive. Although the Deputy Director, Defense Logistics Agency, did not fully agree with revising causative research procedures, his response indicates that DLA would use the enhanced capabilities provided by the Distribution Standard System to investigate and analyze errors at the national stock number and storage location level. This alternative action satisfies the intent of our recommendation. Therefore, no additional comments are required.

Table of Contents

Executive Summary	i
Part I - Audit Results	
Audit Background	2
Audit Objectives	3
Finding A. Inventory Record Accuracy and Controls	4
Finding B. Causative Research Procedures	11
Part II - Additional Information	
Appendix A. Audit Process	
Scope	16
Methodology	16
Management Control Program	17
Appendix B. Summary of Prior Coverage	18
Appendix C. Defense Distribution Depots' Workload	21
Appendix D. Summary of Observed Physical Inventory	
Counts	22
Appendix E. Report Distribution	23
Part III - Management Comments	
Under Secretary of Defense for Acquisition and Technology Comments	26
Defense Logistics Agency Comments	27

Part I - Audit Results

Audit Background

Introduction. DoD organizations buy large amounts of materiel and store it at distribution depots and other storage activities until needed. In FY 1996, the ending Defense Business Operations Fund (DBOF) inventory balance was about \$57.1 billion. About 75 percent of the DBOF inventory was stored at distribution depots managed by the Defense Logistics Agency (DLA). Accordingly, DLA management practices and controls had a significant influence on the DBOF financial statements. The depots perform warehousing functions including the receipt of newly procured items and field returns; issue of materiel to customers; conduct of physical inventories; and care, preservation, and quality control of items in storage.

DLA Depot System. Before FY 1992, the Military Departments and DLA (DoD Components) operated their own distribution depots and each Component developed unique distribution systems and operating procedures for their depots. On April 12, 1990, the Deputy Secretary of Defense approved implementation of Defense Management Review Decision 902, "Consolidation of Defense Supply Depots," October 24, 1989, which resulted in the consolidation of 30 DoD Component depots into a single, unified military supply distribution system managed by DLA. Because of subsequent Base Realignment and Closure actions, the number of DLA distribution depots has decreased from 30 to 23 as of September 30, 1996.

At the end of FY 1996, the DLA depot system consisted of two regions (a west region located in Stockton, California, and an east region, located in New Cumberland, Pennsylvania) and 23 individual distribution depots. Collectively, the 23 depots processed approximately 5.9 million receipts, shipped about 21.3 million items, and stored about 5.1 million items. (See Appendix C for details.)

Inventory Records. Inventory records form the basis for management purchase decisions. During FY 1996, procedures (including implementation of the Distribution Standard System) were being implemented that will make the distribution depots accountable for the inventory records of all materiel stored at the depots. Before implementation of these procedures, the Military Department Inventory Control Points (ICPs) maintained the accountable records, and the distribution depots maintained the custodial records. Reconciliations between the two sets of records were required to ensure consistency between the record balances.

The General Accounting Office (GAO) cited management of DoD inventory as a high-risk area, and improving materiel management has been a principal DoD management improvement goal for many years. One long-standing inventory management problem has been the inability of DoD organizations to maintain accurate records for materiel on hand at the distribution depots.

To correct these inventory problems, DoD has begun several major initiatives, including depot consolidations and implementation of the Distribution Standard System (DSS). Besides improving inventory accuracy, the initiatives are intended to reduce inventory levels significantly, standardize distribution operations throughout DoD, achieve total asset visibility, eliminate duplicate recordkeeping, and reduce distribution costs. The initiatives, for the most part, were still ongoing during FY 1996. Consequently, the intended benefits have not been fully achieved.

DLA plans to replace remaining Military Department distribution legacy subsystems with DSS. DSS should provide an environment that allows for standard operations at all of the distribution depots managed by DLA. DSS records will be used to update the DoD Component logistics system records, which are used by the Defense Finance and Accounting Service to prepare financial statements.

Audit Responsibilities. The Chief Financial Officers (CFO) Act of 1990 (Public Law 101-576, November 15, 1990), as amended by the Federal Financial Management Act of 1994 (Public Law 103-356, October 13, 1994), requires us to audit the FY 1996 DBOF financial statements. An essential part of our audit responsibility is to ensure that management controls are adequate for those portions of the logistics feeder systems (such as the system used to account for on-hand stock at the distribution depots) to provide complete, accurate, and reliable data to the Defense Finance and Accounting Service to prepare financial statements.

In December 1996, the Under Secretary of Defense (Comptroller) announced that the DBOF would be realigned into several working capital funds. Future financial statement audits for these working capital funds will be separate. This realignment does not affect the matters discussed in this report. However, the realignment will affect the design of the annual statistical sample discussed in Finding A. This report is the third in a series of reports pertaining to the inventory accounts of the Defense Business Operations Fund.

Audit Objectives

The overall audit objective was to determine whether the inventory accounts of the FY 1996 Defense Business Operations Fund financial statements were presented fairly in accordance with the "other comprehensive basis of accounting" described in Office of Management and Budget Bulletin No. 94-01, "Form and Content of Agency Financial Statements," November 16, 1993. For this part of the audit, we evaluated inventory record accuracy and management controls at the DLA distribution depots. We also evaluated those segments of the DLA management control program applicable to inventory record accuracy. See Appendix A for a complete discussion of the scope, methodology, and the management control program and Appendix B for a summary of prior audit coverage.

Finding A. Inventory Record Accuracy and Controls

The DLA plan to assess the overall accuracy of its inventory records did not meet the CFO Act requirements to assess that portion of the reported \$57.1 billion of DBOF inventory stored at the distribution depots. In addition, DLA did not have the necessary controls in place to ensure that all scheduled inventories were completed, data transferred from legacy systems to DSS were accurate, and standard distribution operating procedures were established. Furthermore, the Deputy Under Secretary of Defense (Logistics) did not establish a standard against which DLA could measure inventory record accuracy at its distribution depots because a sampling plan was not established. These conditions existed because DLA management was concerned with logistics record accuracy and had not focused its attention on financial statement reporting. In addition, changes at the depots because of Base Realignment and Closure actions and DSS standardization initiatives contributed to the management control weaknesses related to inventory accuracy and procedures including inaccurate record balances, unrecorded materiel, unmarked storage locations, and duplicate balances. As a result, DLA could not accurately measure inventory accuracy for financial statement purposes, and distribution management controls could not be relied upon to provide complete, accurate, and reliable inventory data.

Inventory Records

Inventory Policies. Procedures for maintaining DoD inventory records are contained in DoD Directive 4140.1, "Materiel Management Policy," January 1993; DoD 4000.25-2-M, "Military Standard Transaction Reporting and Accounting Procedures (MILSTRAP)," May 1987; and Approved MILSTRAP Change Letter (AMCL 8A), "Revised Procedures for Physical Inventory Control," August 1996. These procedures require that the distribution depots receive and issue materiel; care for materiel in storage; and maintain inventory records that reflect the correct quantity, condition, ownership, and location of all materiel on hand at the depots.

A fundamental shift in DoD policy began in FY 1993 with the initial issuance of AMCL 8A. The revised policy set in motion a number of changes that, when implemented, are intended to result in a single, shared inventory record balance for on-hand supplies maintained by DLA distribution depots. The single record balance will be made possible by and depends upon the successful implementation of other DoD efforts to transfer accountable record

Finding A. Inventory Record Accuracy and Controls

responsibilities from the Military Departments to DLA and to fully implement DSS at all DLA distribution depots. The actions were not completed at the end of FY 1996.

Inventory Records. DoD supply management organizations maintained perpetual inventory records for DBOF inventory and will continue to do so for the newly created working capital funds. Perpetual records are continuously updated as the distribution depots receive and issue materiel and when depot personnel adjust record balances to agree with the results of physical inventories. Updating inventory records provides numerous opportunities for warehouse personnel to make errors that create imbalances (gains and losses) between on-hand balances and inventory records.

Physical Inventory Requirements. Inventory accuracy is traditionally measured by either taking wall-to-wall inventories at the end of the reporting period or by maintaining perpetual records and periodically comparing the records to on-hand balances. Because of the dynamic nature of DoD inventory and the costs associated with taking wall-to-wall inventories, DoD 4000.25-2-M requires that the accuracy of perpetual inventory records be assessed using statistical sampling techniques.

DoD established the Inventory Control Program as a management control mechanism to ensure that key attributes of on-hand materiel such as quantity, location, ownership, and condition are accurately reflected in the perpetual inventory records. For an inventory control program to be effective, a statistical sampling plan must be developed to assess overall record accuracy through physical inventories. The accuracy rate must then be compared against an established standard. For a statistical sampling plan to be valid, all scheduled physical inventories must be completed as planned.

Assessing Inventory Record Accuracy

DLA did not adequately assess the overall accuracy of its distribution depot inventory records using a statistical sampling plan. Also, DLA did not have the necessary controls in place to ensure that scheduled inventories were completed. In addition, the Deputy Under Secretary of Defense (Logistics) did not establish a standard against which DLA could measure inventory record accuracy.

Statistical Sampling Plan. Since FY 1993, DoD has reported that it would use statistical sampling techniques as the basis for measuring and validating the accuracy of supply records for logistics and CFO purposes. The logistics community is concerned with the record accuracy rate, defined as the percentage of records that do not require an adjustment after a physical

Finding A. Inventory Record Accuracy and Controls

inventory is taken. Resources are directed toward high-demand items, controlled items, and weapon system critical items to minimize denials. (A denial occurs when depot records indicate sufficient materiel exists to meet a customer's request but either insufficient or no materiel is on hand at the depot.) To measure record accuracy for the purposes of the CFO Act, the sampling plan must be designed to measure the accuracy of records in terms of the dollar-value accuracy of inventory at the end of the fiscal year. Resources are directed mostly at high-dollar-value items without regard to weapon system applicability or other key record attributes.

Intermittent efforts have been made by DoD organizations since FY 1994 to develop a DoD-wide sampling plan that would meet both logistics and CFO Act requirements. A dual-purpose sampling plan for DBOF inventory was a complex task because of the subsidiary inventory accounts involved and the accountability for inventory records being spread out among the Military Departments and DLA. A DoD-wide sampling plan was not developed mainly because of turnover among key personnel and disagreements about the most appropriate sampling methodology to use to meet both logistics and CFO Act requirements.

The consolidation of the distribution depots under DLA offered an opportunity for DLA to develop a statistical sampling plan covering the materiel stored at the depots, which represented approximately 75 percent of total DBOF inventory. DLA developed, but did not implement, a sampling plan to measure inventory record accuracy for logistics purposes. However, the plan did not meet the requirements of the CFO Act. Because extensive coordination is still needed between logistics, financial, and audit personnel to determine specifically how statistical sampling should be used to meet logistics and CFO Act requirements and to address the newly created working capital funds, we will cover this issue in detail in a subsequent audit report. Therefore, we have no recommendation.

Completion of Scheduled Inventories. The DLA distribution depots did not have controls in place to ensure that scheduled inventories were completed. The depots are responsible for conducting physical inventories, determining whether discrepancies exist, and identifying and correcting the underlying causes of inventory discrepancies. To provide a statistically valid measure of inventory record accuracy, all items selected for physical inventory must be inspected as planned.

DLA performed numerous inventories during FY 1996. The majority of those inventories were unscheduled and taken for purposes such as ensuring the record accuracy of controlled items or correcting the record balances for items that caused a materiel denial. Scheduled inventories include complete counts of certain controlled items and predetermined sample inventories on other items

Finding A. Inventory Record Accuracy and Controls

taken to measure record accuracy. Our audit showed that not all scheduled inventories were conducted as planned. For example:

- o Army Audit Agency reported that three of the DLA distribution depots they visited did not complete scheduled inventories as required by DoD 4000.25-2-M. Two depots cited lack of personnel and depot system problems as the reasons for not completing scheduled inventories.

- o Air Force Audit Agency reported that Air Force personnel did not require the Distribution Depot, Warner Robins, Georgia, to perform quarterly inventories of 500 items as required by Air Force policy. The Air Force halted the inventories pending the transfer of accountability to DLA. (During most of FY 1996, the Air Force still maintained the accountable records for inventory and was responsible for scheduling inventories.)

Because the completion of scheduled physical inventories is such a critical part of a statistical sampling plan used to assess overall inventory record accuracy, DLA management should have a mechanism in place to track scheduled inventories to be sure that they are completed as planned. During FY 1996, DLA had the capability to track scheduled inventories at only the five former Navy distribution depots, the other 18 depots did not have this capability.

Inventory Accuracy Standard. The Deputy Under Secretary of Defense (Logistics) has not established an overall inventory accuracy standard against which that DLA could compare the results of the statistical sample. AMCL 8A states that the Inventory Control Effectiveness Report will be revised once inventory sampling is established and that one of the planned changes is to establish a standard for overall record accuracy. Standards have already been established for location accuracy, property accountability for ammunition, and controlled items not subject to complete physical inventories. Once a sampling plan is developed and implemented, the accuracy rate should be measured against an established DoD standard. We believe that this is an important performance measure of how well storage activities manage the materiel in their custody. This standard can be established before the sampling plan is implemented.

Management Control Weaknesses

Our review of management controls at the DLA distribution depots visited confirmed that long-standing problems such as inaccurate record balances, unrecorded materiel, unmarked storage locations, lack of standard operating procedures, and duplicate balances still existed during FY 1996.

Finding A. Inventory Record Accuracy and Controls

Record Accuracy. Physical inventory counts of 3,656 line items at 16 depots revealed discrepancies in 863 records (See Appendix D.) We coordinated these inventory counts with auditors from the U.S. Army Audit Agency, the Naval Audit Service, and the Air Force Audit Agency. DLA distribution depot personnel performed the physical inventory counts and identified the discrepancies in the records. Although our sample results were not projected to all materiel stored at the 23 DLA depots, they indicate material weaknesses in management controls that must be corrected.

Causes of Record Inaccuracies. Inventory record inaccuracies are normally caused by various materiel handling, storage, and transaction processing errors. These types of errors have been well documented in past Inspector General, DoD, Military Department audit agency, and GAO audit reports. Audit work performed at the distribution depots during FY 1996 confirmed that problems such as unrecorded materiel, unmarked storage locations, lack of standard operating procedures, and duplicate balances existed. Insufficient audit testing was done to determine the overall impact that the errors had on the DBOF financial statements. In addition, because a valid statistical sample had not been implemented for that purpose, auditors could not rely on depot performance measures.

Ongoing Initiatives

Two major DoD initiatives to improve distribution operations and reduce operating costs--depot consolidations and implementation of the DSS--were ongoing during FY 1996. These initiatives disrupted depot operations, further exacerbating weaknesses in distribution depot management controls.

Depot Consolidations. Consolidation of distribution depot operations because of Base Realignment and Closure actions caused disruption by increasing workload at a time when staff levels were being reduced. Additional workload resulted because materiel had to be repositioned from closed or realigned depots to other depots. For example, a depot in Pensacola, Florida, was closed during FY 1996 and about \$221 million in materiel had to be redistributed to other depots. Other depots had either major mission realignments ongoing or were in the process of closing during FY 1996.

Conversion to the Distribution Standard System. Conversion from the Military Department and DLA distribution systems to the DSS caused disruption of data integrity and imposed new training requirements. As of September 30, 1996, DSS was operational at only 5 of the 23 distribution depots. When the new system was fielded, the five depots experienced the following problems.

Finding A. Inventory Record Accuracy and Controls

- o In the 2 months following DSS implementation, materiel denial rates increased by 59 percent at the Defense Depot, Richmond, Virginia, and by 55 percent at the Defense Depot, San Joaquin, California.

- o In April 1996, an interface problem between the DSS and the DLA supply management system resulted in the reconciliation between accountable and custodial records being suspended until a system change request could be completed to fix the problem. This system change request is scheduled to be completed during FY 1997.

- o Improper use of DSS procedures in processing materiel receipts and issues at several depots contributed to the inventory record discrepancies. The improper use of standard procedures at the Defense Depot Columbus, Ohio, contributed the inventory records for six types of chemical suits being misstated by \$122 million. (See Appendix B.)

Conclusion

The ongoing DoD initiatives to consolidate distribution depots and to establish standard operations and automated systems, when fully implemented, should result in more efficient and less costly distribution operations. However, DLA must take further action to realize the full benefits of those initiatives by developing and implementing an annual statistical sampling plan for evaluating inventory record accuracy and establishing management controls to ensure that all inventories required by the plan are completed. In addition, to facilitate the transition from Military Department to standard DoD distribution depot operations, DLA should establish additional management controls that:

- o confirm that inventory data in the remaining Military Component legacy systems are complete and accurate before transferring to the DSS.

- o require all 23 depots to use standard DLA operating procedures and ensure depot personnel are trained to use the DSS.

Recommendations and Management Comments

A.1. We recommend that the Deputy Under Secretary of Defense (Logistics) establish an inventory accuracy standard for DoD distribution depots.

Finding A. Inventory Record Accuracy and Controls

Management Comments. The Deputy Under Secretary of Defense (Logistics) concurred with this recommendation, stating that the Joint Physical Inventory Work Group will be tasked to develop an inventory accuracy standard by October 31, 1997.

A.2. We recommend that the Director, Defense Logistics Agency:

a. Establish, as part of the management control program, a tracking process to ensure that all scheduled inventories are conducted as part of the annual sampling plan.

Management Comments. The Deputy Director, DLA, concurred with this recommendation, stating that both legacy and the DSS sampling models have adequate controls to ensure that items selected for a sample are actually inventoried. The estimated completion date for implementing the required controls at all depots is September 1998.

b. Ensure the accuracy of data transferred from the legacy systems to DSS.

Management Comments. The Deputy Director, DLA, concurred with this recommendation, stating that in converting data from the legacy systems to the DSS, all data from the legacy system's transaction history, item balances, and item data will be transferred. Edit and validation will be performed, to include statistical sampling, to ensure the accuracy of the transferred data. The estimated completion date is September 1998.

c. Implement standard distribution depot operating procedures and ensure that all personnel are trained to use the Distribution Standard System.

Management Comments. The Deputy Director, DLA, concurred with this recommendation, stating that all distribution depots will have standard operating procedures when the DSS is fully implemented. Prior to conversion at the remaining sites, a team of DSS experts will train depot personnel to operate the system properly. The estimated completion date is September 1998.

Finding B. Causative Research Procedures

Distribution depot procedures for researching the causes of inventory discrepancies focused on correcting the record balances of the items counted, not on investigating adverse trends such as large variances at depots and within commodities. In addition, some depots did not perform the required causative research or use the DSS to perform this research. As a result, distribution depot procedures did not identify the underlying causes of record discrepancies. Consequently, causative research continued to command significant resources but did little to improve operations.

Discrepancy Research Procedures

DoD Manual 4000.25-2-M requires that distribution depots research discrepancies found during physical inventory counts. Such research consists of postcount validations, preadjustment research, and causative research. The postcount validations and preadjustment research are conducted to ensure that inventory records accurately reflect the actual on-hand balances for the materiel counted. The causative research is conducted to identify, analyze, and evaluate the causes of inventory discrepancies with the aim of eliminating systemic errors.

DLA Supply Operations Policy and Procedures Memorandum No. 92-15, "Causative Research and Request for Investigation of Inventory Adjustments at the DLA Defense Distribution Depots," July 1992, establishes specific causative research procedures for the DLA distribution depots. Effective causative research should decrease the number of inventory adjustments over time as the management control weaknesses causing the errors are systematically detected and corrected.

Existing Procedures

After taking physical inventories, depot personnel generally performed post-count validations and preadjustment research and used the results to correct the inventory record balances for the items counted. However, depot personnel used causative research procedures that were not effective to obtain the summary information needed to identify the underlying causes of record discrepancies. In addition, not all of the required causative research was conducted.

Finding B. Causative Research Procedures

Underlying Causes. Causative research should identify, classify, and summarize the reasons for the differences between actual and recorded inventory balances so that inventory managers can correct failures in existing management control systems that caused the discrepancies and reduce the likelihood of future errors. Research ends when the cause of the discrepancy has been discovered and reported or when, after reviews of the transactions are completed, no conclusive findings are possible.

Audits over the past 15 years have repeatedly criticized distribution depots for their inability to successfully diagnose the underlying causes for inventory record errors and for frequently ending their research with inconclusive results. Consequently, inventory managers did not have adequate summary data to take the actions necessary to improve receipt, issue, and storage practices. We found similar problems during this audit. For example:

- o Army Audit Agency reported that three distribution depots assigned the generic cause code "erroneous count" to about 52 percent of the discrepancies they researched. That code was inadequate for identifying root causes or for performing trend analysis.

- o Naval Audit Service reported that one DLA depot performed causative research that rarely resulted in actions to correct system or procedural deficiencies. The root cause of 52 percent of the inventory adjustments reviewed could not be determined.

- o Air Force Audit Agency reported that 375 of the 1,119 counts they observed had inventory variances of \$166 million. Depot personnel could not identify the causes for 220 of the 375 variances.

- o Similar problems existed at the three distribution depots we visited. However, two of the depots were required to only research inventory discrepancies over \$100,000. (The usual standard is to research record discrepancies exceeding \$16,000.)

As a result, causative research continued to command significant resources but did little to improve distribution operations. Although these conditions may not be representative of all 23 distribution depots, they are consistent with conditions reported in previous audit reports. The IG, DoD, asked DLA to provide any available data summarizing the results of causative research for 23 distribution depots during FY 1996, but DLA did not do so.

Completion of Required Research. Some distribution depots did not conduct required research. Depot personnel cited reduced staffing levels as the main reason for not doing so. For example:

Finding B. Causative Research Procedures

- o Defense Depot, Norfolk, Virginia, had a backlog of 4,851 causative research packages, equating to approximately 17 years of effort. The backlog was so extensive that the depot requested a waiver from performing research from DLA headquarters.

- o Defense Depot, Richmond, Virginia, had not performed causative research and accumulated a backlog exceeding 700 research packages during FY 1996.

In response to past criticism of inadequate procedures and the failure of organizations to complete all required research, DoD organizations devoted additional personnel to doing causative research. However, subsequent audit reports concluded that even when additional personnel were added, causative research procedures did not improve substantially. Devoting additional personnel to improve research has become an increasingly more difficult approach to adopt because the distribution depots, like many other DoD organizations, have fewer available resources. In addition, although millions of dollars have been spent to develop and implement DSS, procedures have not been developed to use the system to improve research methods. We did not assess claims about insufficient resources because we believe that current causative research methods should be reevaluated to take advantage of DSS capabilities.

Trend Analysis

DLA personnel did not use computer-assisted techniques to analyze discrepancies across distribution depots and commodities. One of the primary reasons for researching inventory variances is to identify adverse patterns and trends throughout the distribution depot system. Implementation of DSS, when completed, should provide DLA with the capability to analyze inventory data across its 23 distribution depots. Such analysis could provide depots with the information needed to focus their efforts on improving receipt, issue, and storage practices through training, quality control checks, and other actions.

The 863 line items in the audit sample containing discrepancies showed obvious adverse patterns. For example, commodities such as medical, clothing, and textile items had much higher error rates than other commodities, regardless of the storage location. In addition, the record error rates varied significantly among depots. Existing causative research procedures are not designed to evaluate discrepancies in this way. DLA personnel noted that each depot was responsible for using causative research to identify and correct problems. However, we believe that by revising causative research procedures to focus

Finding B. Causative Research Procedures

more on identifying depots and commodities with large record discrepancies, limited distribution depot resources could be better used.

Recommendations, Management Comments, and Audit Response

B. We recommend that the Director, Defense Logistics Agency, revise depot procedures for researching the causes of inventory discrepancies to:

- o focus on investigating adverse trends, such as depots and commodities with large balances, and

- o use computer-assisted techniques, such as the Distribution Standard System.

Management Comments. The Deputy Director, DLA, partially concurred with the recommendation. He agreed that, when DSS is fully implemented, the depots will have the ability to perform causative research more efficiently. The latest enhancement to DSS gives the depots the ability to automatically identify adjustments requiring research, obtain location level transaction histories, identify depot personnel inputting DSS transactions, and use radio frequency updates to balance records in real time. Estimated completion date is September 1998.

The Deputy Director did not agree to focus research efforts on investigating adverse trends, such as depots and commodities with large balances. He stated that the most useful methodology for identifying and correcting procedural, systematic, and personnel errors is to investigate and analyze at the national stock number and storage location level. Then, depot managers will have both conclusive evidence of how an error occurred and the ability to immediately correct the situation that caused the error.

Audit Response. The Deputy Director's suggested method of improving existing causative research methods by using the enhanced capabilities provided by DSS to identify, investigate, and correct errors at the national stock number and storage location level meets the intent of our recommendation. Therefore, no additional comments are required.

Part II - Additional Information

Appendix A. Audit Process

Scope

Work Performed. As part of our assessment of the overall accuracy of the FY 1996 DBOF inventory accounts, we evaluated the results of physical inventories taken at our request by depot personnel. These inventories consisted of 3,656 line items located at 16 distribution depots. (A line item represents a distinct condition code for an item at a particular distribution depot.)

We also reviewed selected management controls at 13 distribution depots, including 11 of the 16 depots where we collected information. We included two additional depots (Richmond, Virginia, and San Joaquin, California) because those depots were using the DSS and their mission had not been significantly affected by Base Realignment and Closures.

Audit Assistance. We relied on data gathered by the Army Audit Agency, the Naval Audit Service, and the Air Force Audit Agency in preparing this report. Auditors from the Inspector General, DoD, and the Military Department audit organizations visited DLA distribution depots, observed physical inventory counts, and evaluated selected management controls. The information presented in this report is a summary of the most significant deficiencies reported.

Methodology

Use of Technical Assistance. The 3,656 line items we reviewed were selected by the Quantitative Analysis Branch of the Inspector General, DoD, as part of an overall statistical sampling plan to evaluate DBOF inventory. The sampling plan required that multiple counts (sampling units) be taken at the 16 depots and that between 39 and 44 line items be included in each sampling unit. The total number of line items counted at each depot ranged from 39 to 480.

Use of Computer-Processed Data. We did a limited review of the reliability of computer-processed data in our comparison of physical inventories to depot records for the 3,656 line items reviewed. There were discrepancies between inventory records in the automated systems and actual observations of the items those records represented for 863 records. However, because the results of our review were not projected to materiel stored at the 23 DLA depots, we are unable to determine the extent to which these errors affected the Defense Business Operation Fund financial statements. The original sample from which these data were extracted was designed to project across the Defense Business Operation Fund as a whole (one projection to include DBOF wholesale and retail sites).

Audit Types, Dates, and Standards. We performed this financial-related audit from August 1996 through June 1997 in accordance with auditing standards issued by the Comptroller General of the United States, as implemented by the Inspector General, DoD.

Contacts During the Audit. We visited or contacted individuals and organizations within DoD. Further details are available on request.

Management Control Program

DoD Directive 5010.38,* "Internal Management Control Program," April 1987, requires DoD organizations to implement a comprehensive system of management controls that provides reasonable assurance that programs are operating as intended and to evaluate the adequacy of those controls. Key assurances pertaining to inventory given by DLA in its annual assurance statement and other management reports were that assets had been adequately accounted for and that financial data were reliable.

Scope of Review of the Management Control Program. We reviewed the adequacy of management controls over materiel stored at the DLA distribution depots. Specifically, we reviewed assessable units and checklists established for the DLA distribution depots pertaining to planning physical inventories, completing inventories as planned, and correcting discrepancies found during physical inventories.

Adequacy of Management Controls. We identified material management control weaknesses that affected the accuracy of inventory records maintained by the DLA distribution depots. Management controls were not adequate to ensure that a statistical sampling plan and overall accuracy goals were established to measure the accuracy of inventory records at the DLA distribution depots, all scheduled inventories were conducted, and causative research was performed to identify the underlying causes of record discrepancies. We will provide a copy of this report to the DLA senior official responsible for management controls.

Adequacy of Management's Self Evaluation. DLA did not report any new material weaknesses in the FY 1996 Annual Assurance Statement, pertaining to the inventory accuracy and control problems discussed in this report. However, an uncorrected material weakness was carried forward from FY 1993. DLA reported that its Inventory Control Program was not adequate and that all distribution depots were not conducting the required processes.

*DoD Directive 5010.38 has been revised as "Management Control Program," August 26, 1996. The audit was performed under the April 1987 version of the directive.

Appendix B. Summary of Prior Coverage

During the past 5 years, several audit reports and other reviews have been issued that relate to DBOF inventory. However, because of significant changes that DoD has made or are ongoing, we limited our review to relevant audit reports and other reviews completed in the last 2 years.

General Accounting Office

GAO Report No. HR-97-5, "Defense Inventory Management," February 1997, states that DoD has made some progress in addressing inventory management problems identified in prior audit reports, but, it has not achieved the expected benefits of DBOF and other DoD initiatives. Large amounts of excess inventory still exist, oversight remains inadequate, and financial reports are unreliable. The report concluded that the problems will take some time to correct and DoD inventory management therefore remains a high risk area. In the short term, DoD should emphasize efficient operations of existing inventory systems by focusing on record accuracy. The report contained no recommendations.

Inspector General, DoD

Inspector General, DoD, Report No. 97-102, "Inventory Accuracy at the Defense Depot, Columbus, Ohio," February 28, 1997, states the Defense Depot, Columbus, Ohio, did not include 696,380 chemical suits valued at \$51 million in its inventory records. Additionally, the depot records were misstated by 1.04 million suits, valued at \$71 million. The report recommended that the DLA research the causes of discrepancies, process materiel from remote locations using a redistribution order, mark storage locations in the warehouses, and use proper stock issue procedures. The DLA generally agreed with the recommendations.

Inspector General, DoD, Report No. 97-159, "Inventory Accuracy at the Defense Depot, Susquehanna, Pennsylvania," June 12, 1997, states that the Defense Depot, Susquehanna, Pennsylvania, custodial records did not reflect correct inventory balances for 1,969 consumable items for which management responsibility had been transferred from the Navy to the DLA under the Consumable Item Transfer Program. Consequently, the DLA financial statements were misstated by \$16 million. The Depot also retained \$1 million in obsolete inventory and did not assign storage locations to materiel located in a warehouse it shared with the Naval Inventory Control Point. The report recommended that DLA identify and dispose of obsolete items, perform a wall-to-wall inventory of items in the warehouse it shares with the Naval

Inventory Control Point, and assign storage locations to materiel stored there. The DLA agreed with the recommendations.

Army Audit Agency

Army Audit Agency Report No. AA 97-86, "FY 96 Army Defense Business Operations Fund Financial Statements: Supply Management Inventories," December 31, 1996, summarizes the work that the Army Audit Agency performed on the Army portion of the FY 1996 DBOF financial statements. That work included a review of 234 items valued at \$1.7 billion at 4 DLA distribution depots. About 25 percent of the depot records contained discrepancies. The report concluded that the causative research conducted by the depots frequently did not identify the root causes for the inventory adjustments and that scheduled inventories were not conducted as required by DoD policies. The report contained no recommendations.

Naval Audit Service

Naval Audit Service Report No. 96-002 "Fiscal Year 1996 Consolidating Financial Statements of the Department of the Navy Defense Business Operations Fund," February 1997, summarized the results of audit work conducted by the Naval Audit Service on the Navy DBOF. That work included a review of 379 Navy-owned items located at the DLA distribution depots. The report concluded that about 22 percent of the items that were on hand at the DLA distribution depots differed from the supply records. The inaccuracies occurred because of various human errors in inventory processing. The report contained no recommendations pertaining to inventory accuracy.

Air Force Audit Agency

Air Force Audit Agency Report No. 42597034, "Air Force Supply Management Defense Business Operation Fund (DBOF), Fiscal Year (FY) 1996 Selected Wholesale Inventory Accounts," April 11, 1997 summarized the results of work done by the Air Force Audit Agency at Warner Robins Air Force Base. That work included a review of 360 items valued at about \$1.7 billion and an evaluation of selected management controls. The report concluded that DLA and Air Force personnel had not effectively implemented controls to provide reasonable assurance that supply inventory account balances were accurately reflected in the DBOF consolidated financial statements. Specifically, about 38 percent of the sample items exhibited variances between on-hand and recorded balances. The report concluded that ineffective causative

Appendix B. Prior Audits and Other Reviews

research procedures, nonperformance of required inventories, and consolidation of inventory data systems contributed to the errors. The report contained no recommendations.

Air Force Audit Agency Report No. 44097010, "Air Force Supply Management Defense Business Operation Fund (DBOF), Fiscal Year 1996 Selected Wholesale Inventory Accounts, Defense Depot Oklahoma City, Tinker AFB, OK 73145," January 27, 1997 summarized the audit results of the work done by Air Force Audit Agency at Tinker Air Force Base. That work included a review of 264 items valued at about \$452 million and selected management controls. The report concluded that about 31 percent of the items reviewed exhibited some degree of variance between on-hand and recorded balances. In addition, the process of researching inventory variances did not provide reasonable assurance of financial data accuracy and inventory discrepancies were not always corrected in the accountable records. The report contained no recommendations.

Other Reviews

IBES, Inc., Operations Research Study Report "Impact of Inventory Accuracy on Inventory Investment," December 1995, was commissioned by the DLA Operations Research Office to study the relationship between inventory accuracy and investment cost. The study concluded that an improvement in inventory accuracy would result in a corresponding decrease in inventory investment cost. Through analysis of transaction history file data, about 892,700 DLA-owned items (excluding bulk fuels and subsistence) were analyzed. The inventory accuracy rate, defined as the likelihood that an item would not have an inventory adjustment in a given year, was estimated to be 78 percent. The study recommended that DLA examine the total costs of inventory inaccuracies and eliminate those functions that do not improve inventory accuracy.

Report to Congress, "DoD Annual Report: Security and Control of Supplies For Fiscal Year 1994," April 1995, was the last in a series of annual reports required by Title 10, United States Code, Section 2891. The report summarized the status of DoD efforts to maintain adequate physical security and management control over inventory. The DoD Joint Physical Inventory Working Group, consisting of representatives from the Military Departments and DLA, identified key inventory control weaknesses. The lack of a DoD-wide statistical sample and a single-asset balance were the primary deficiencies noted. Most corrective actions were to have been completed by FY 1996.

Appendix C. Defense Distribution Depots' Workload

<u>Depot</u> ¹	<u>NSNs</u> ² <u>Stored</u>	<u>Value</u> <u>(millions)</u>	<u>Receipts</u>	<u>Issues</u>
Albany	18,356	\$ 728	19,041	89,382
Anniston	37,882	4,960	91,887	127,708
Barstow	31,755	1,100	48,580	81,220
Cherry Point	105,117	2,500	128,081	244,267
Columbus	268,398	756	73,801	1,046,646
Corpus Christi	27,192	4,000	138,225	215,971
Hill	183,772	7,700	313,707	485,838
Jacksonville	162,972	3,493	234,337	373,060
Letterkenny	64,307	3,494	108,518	170,607
McClellan	182,130	4,700	386,466	475,116
Memphis	123,569	421	19,178	1,200,605
Norfolk	613,699	6,323	465,147	961,065
Ogden	135,683	558	172,607	1,396,545
Oklahoma City	213,751	8,100	608,415	888,593
Puget Sound	98,214	562	70,877	108,442
Red River	150,808	6,200	190,299	589,698
Richmond	471,679	975	122,492	1,185,744
San Antonio	229,240	10,900	400,824	850,156
San Diego	347,301	4,800	531,799	650,870
San Joaquin	741,043	6,800	660,929	3,206,230
Susquehanna	616,494	4,311	617,831	6,253,621
Tobyhanna	58,958	4,346	98,841	145,243
Warner Robins	241,052	12,500	408,128	584,980
Total	5,123,372	\$100,227³	5,910,010	21,331,607

¹The total of 23 depots includes counting Tracy and Sharpe as one depot (San Joaquin) and New Cumberland and Mechanicsburg as one depot (Susquehanna).

²National stock numbers.

³The \$100.2 billion dollars represents the unadjusted value of all materiel stored at the 23 depots. It is not the same as the \$57.1 billion reported on the DBOF financial statements because materiel other than DBOF inventory is stored at the depots and the financial statements use different valuation methods.

Appendix D. Summary of Observed Physical Inventory Counts

<u>Depot</u>	<u>Sampled Items</u>	<u>Units</u> ¹	<u>Line Items</u> ²	<u>Line Items With Variance</u>
Anniston	40	1	118	21
Barstow	39	1	55	1
Columbus	44	1	50	26
Corpus Christi	38	1	71	14
Hill	141	3	248	40
Jacksonville	132	3	192	9
McClellan	176	4	300	39
Memphis	40	1	45	28
Norfolk	264	6	339	82
Ogden	72	2	92	29
Oklahoma City	264	6	427	100
San Diego	88	2	126	21
San Antonio	220	5	427	129
Susquehanna	132	3	149	55
Tobyhanna	44	1	94	27
Warner Robins	<u>480</u>	<u>12</u>	<u>923</u>	<u>242</u>
Total	2,214	52	3,656	863

¹The quantity represents the number of sample units completed at each site. Each sample unit contained 39 to 44 stock numbers.

²The total number of line items counted. Each separate supply code for a stock number at each depot is a line item.

Appendix E. Report Distribution

Office of the Secretary of Defense

Under Secretary of Defense for Acquisition and Technology
Deputy Under Secretary of Defense (Logistics)
Director, Defense Logistics Studies Information Exchange
Under Secretary of Defense (Comptroller)
Deputy Chief Financial Officer
Deputy Comptroller (Program/Budget)
Director, Accounting Policy
Assistant Secretary of Defense (Public Affairs)

Department of the Army

Auditor General, Department of the Army

Department of the Navy

Assistant Secretary of the Navy (Financial Management and Comptroller)
Auditor General, Department of the Navy

Department of the Air Force

Assistant Secretary of the Air Force (Financial Management and Comptroller)
Auditor General, Department for the Air Force

Other Defense Organizations

Director, Defense Contract Audit Agency
Director, Defense Finance and Accounting Service
Director, Defense Logistics Agency
Director, National Security Agency
Inspector General, National Security Agency

Non-Defense Organizations

Office of Management and Budget
Technical Information Center, National Security and International Affairs Division,
General Accounting Office

Chairman and ranking minority member of each of the following congressional
committees and subcommittees:

Senate Committee on Appropriations
Senate Subcommittee on Defense, Committee on Appropriations
Senate Committee on Armed Services
Senate Committee on Governmental Affairs
House Committee on Appropriations
House Subcommittee on National Security, Committee on Appropriations
House Committee on Government Reform and Oversight
House Committee on Government Management, Information, and Technology,
Committee on Government Reform and Oversight
House Subcommittee on National Security, International Affairs, and Criminal
Justice, Committee on Government Reform and Oversight
House Committee on National Security

Part III - Management Comments

Under Secretary of Defense for Acquisition and Technology Comments



ACQUISITION AND
TECHNOLOGY

(L/MDM)

OFFICE OF THE UNDER SECRETARY OF DEFENSE

3000 DEFENSE PENTAGON
WASHINGTON, DC 20301-3000

10 SEP 1997

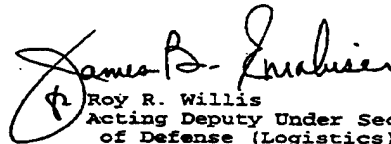
MEMORANDUM FOR DOD INSPECTOR GENERAL

SUBJECT: Response to the Draft Report on the Audit on Inventory Record Accuracy and Management Controls at the Defense Logistics Agency Distribution Depots (Project No. 5FJ-2018.02)

This memorandum responds to your request dated July 17, 1997, requesting comments on subject draft report. This office concurs in your recommendation A.1. regarding the establishment of an inventory accuracy standard for the DoD distribution depots. The Joint Physical Inventory Work Group (JPIWG) will be tasked to develop an inventory accuracy standard by October 31, 1997.

The Defense Logistics Agency (DLA) will respond to your office on the remaining findings and recommendations in the draft audit.

We appreciate the opportunity to comment on this audit report in draft form.


Roy R. Willis
Acting Deputy Under Secretary
of Defense (Logistics)

Defense Logistics Agency Comments



DEFENSE LOGISTICS AGENCY
HEADQUARTERS
8725 JOHN J. KINGMAN ROAD, SUITE 2533
FT. BELVOIR, VIRGINIA 22060-6221

IN REPLY
REFER TO

DDAI

12 SEP 1997

MEMORANDUM FOR THE ASSISTANT INSPECTOR GENERAL FOR AUDITING,
DEPARTMENT OF DEFENSE

SUBJECT: Inventory Record Accuracy and Management Controls at the Defense Logistics
Agency Distribution Depots, 5FJ-2018.02

Enclosed are our comments to your request of 17 July 1997. Should you have any questions,
our Points of Contact are Elaine Parker, 767-6264 or Sharon Entsminger, 767-6267.

Encls


JEFFREY GOLDSTEIN
Chief (Acting), Internal Review

cc:
MMBCA
MML (Carolyn Farley)

Federal Recycling Program  Printed on Recycled Paper

Defense Logistics Agency Comments

inal Report
Reference

vised
ages ii, 4

12 SEP 1997

SUBJECT: Inventory Record Accuracy and Management Controls at the Defense Logistics Agency Distribution Depots, 5FJ-2018.02

FINDING A: Inventory Record Accuracy and Controls (See page 5 of the Draft Report)

DLA COMMENTS: Partially concur. DLA disagrees with the implication that the DLA statistical sampling plan was developed/implemented "to meet the CFO Act requirements to assess the responded \$57.1 billion of DBOF inventory." The DLA sampling plan was developed to satisfy logistical record accuracy assessments. Using this methodology, DLA has an unbiased measurement of the accuracy of the on-hand balance as well as a measure of overall distribution operations. Additionally, our sampling plan provides measurements for various material attributes (e.g., controlled, high unit price, item activity and extended dollar value). Within both the new DSS sampling plan as well as the existing plans in the Service legacy systems, controls are in place to ensure that sample inventories are conducted. DLMSO has taken the lead in bringing DoD, DLA and DoD IG statisticians together in order to develop and/or modify existing sampling plans to meet both logistics and financial measurements. However, based on the requirement to realign the Defense Business Operating Fund into several separate working capital funds for each component, the requirement to establish a single statistical random sample to satisfy both the logistics and financial communities is no longer feasible. This was agreed to at a meeting between the DLMSO and DoD IG in June 1997.

DLA does concur regarding the conditions that contributed to a management control weakness (e.g., unrecorded material, unmarked storage locations, duplicate balances and inaccurate record balances). The management control weaknesses identified in this report relate to Audit Report #97-102, Inventory Accuracy at Defense Depot Columbus, OH, February 28, 1997. DLA concurred with the management control weaknesses in that report and follow-on reporting will be provided under that report.

INTERNAL MANAGEMENT CONTROL WEAKNESS: Partially Concur

ACTION OFFICER: Carolyn S. Farley, Chief Asset Management

REVIEW/APPROVAL: D. P. Keller, RADM, USN, Executive Director Logistics Management

COORDINATION: Elaine Parker, DDAI, 767-6264

DLA APPROVAL:  9/12/97
J. P. Keller - DDAI

12 SEP 1997

SUBJECT: Inventory Record Accuracy and Management Controls at the Defense Logistics Agency Distribution Depots, SFJ-2018.02

RECOMMENDATION A.2: Recommend that the Director, Defense Logistics Agency:

- a. Establish, as part of the management control program, a tracking process to ensure that all scheduled inventories are conducted as part of the annual sampling plan.
- b. Ensure the accuracy of data transferred from the legacy systems to DSS.
- c. Implement standard distribution depot operating procedures and ensure that all personnel are trained to use the Distribution Standard System.

DLA COMMENTS:

- a. Concur. Both the legacy and the DSS sampling models have adequate controls to ensure that the items selected for a sample are actually inventoried. Assessment included under DLA-MML Management Control Objective #10.
- b. Concur. At the time of DSS conversion, all data from the legacy system's transaction history, item balances and item data are transferred to DSS. Edit and validation is performed to ensure the transfer of replicated data to DSS. When DSS was initially implemented in 1994 and 1995 at the original DLA depots and at the former Army depots no inventory sampling method existed to assess the accuracy of on-hand balances retained in the legacy systems. The remaining depots to implement DSS are capable of determining the accuracy of the inventory records through statistical sampling.
- c. Concur. By virtue of implementing DSS in all DLA depots, we are going to have standard operating procedures within DLA distribution. Prior to conversion all personnel are trained on DSS. Each Distribution Region has established a Cadre Team of DSS experts in each of the functional areas. This team travels to each site prior to implementation to conduct on-site training. Additionally, the programmers and analysts that designed DSS are on-site immediately before implementation to conduct training. As incremental enhancements are delivered, additional training is provided.

DISPOSITION: ONGOING. ECD: Sep 98 (Final DSS Implementation)

ACTION OFFICER: Carolyn S. Farley, Chief Asset Management

REVIEW/APPROVAL: D. P. Keller, RADM, USN, Executive Director Logistics Management

COORDINATION: Elaine Parker, DDAI, 767-6264

DLA APPROVAL:  9/12/97
for DLA-EO

Defense Logistics Agency Comments

12 SEP 1997

SUBJECT: Inventory Record Accuracy and Management Controls at the Defense Logistics Agency Distribution Depots, 5FJ-2018.02

FINDING B: Causative Research Procedures. (See page 12 of the Draft Report)

DLA COMMENTS: Partially concur. DLA disagrees with the implication that the depots "focused on correcting the record balances of items counted, not on investigating adverse trends such as large variances at depots and within commodities." The purpose of Causative Research is two-fold - 1) correct the individual line item audit trail, posting the proper supply transaction and 2) conduct analysis of summary level findings to target areas for improvement. To focus trend analysis on large variances at the depot-commodity level provides less substantive root cause identification than the current procedures. The most useful methodology for identifying and correcting procedural, systematic, and personnel errors is to investigate and analyze at the NSN-storage location level. Then specific process improvement recommendations will have both conclusive evidence of how the error occurred and the ability to immediately correct the situation that caused the error.

DLA does concur that "Causative Research continued to command significant resources but did little to improve operations." The preponderance of the inventory errors found in FY96 occurred years prior under outdated procedures and systems. Since then, many leading edge distribution processes have been implemented (e.g. conversion to Quantity By Location, location level audit trails and real-time balance updates). Therefore, any "trend" analysis would yield limited payback in terms of future process improvement recommendations that would no longer be applicable under the current systems and procedures.

INTERNAL MANAGEMENT CONTROL WEAKNESS: Partially Concur

ACTION OFFICER: Carolyn S. Farley, Chief Asset Management

REVIEW/APPROVAL: D. P. Keller, RADM, USN, Executive Director Logistics Management

COORDINATION: Elaine Parker, DDAL, 767-6264

DLA APPROVAL:  9/12/97
D. P. KELLER

12 SEP 1997

SUBJECT: Inventory Record Accuracy and Management Controls at the Defense Logistics Agency Distribution Depots, 5FJ-2018.02

RECOMMENDATION B: Recommend that the Director, Defense Logistics Agency, revise depot procedures for researching the causes of inventory discrepancies to:

- a. Focus on investigating adverse trends, such as depots and commodities with large balances, and
- b. Use computer-assisted techniques, such as the Distribution Standard System.

DLA COMMENTS:

a. **Nonconcur.** The purpose of causative research is two-fold - 1) correct the audit trail and post the proper supply transaction and 2) identify the root cause to prevent further adjustments. The procedures for causative research are adequate to do both. To focus trend analysis on large variances at the depot-commodity level provides less substantive root cause identification than the current procedures. The most useful methodology for identifying and correcting procedural, systematic, and personnel errors is to investigate and analyze at the NSN-storage location level. Then specific process improvement recommendations will have both conclusive evidence of how the error occurred and the ability to immediately correct the situation that caused the error.

b. **Concur.** With the latest enhancement to DSS implemented, the DLA depots have the ability to utilize DSS capabilities to the fullest in the causative research process. These enhancements provide the capability to: automatically identify adjustments requiring research; location level transaction history; user identification of each balance affecting transaction; and, radio frequency updates to the balance in real-time.

DISPOSITION: ONGOING. ECD: Sep 98

ACTION OFFICER: Carolyn S. Farley, Chief Asset Management

REVIEW/APPROVAL: D. P. Keller, RADM, USN, Executive Director Logistics Management

COORDINATION: Elaine Parker, DDAL, 767-6264

DLA APPROVAL:  9/12/97

Audit Team Members

This report was prepared by the Finance and Accounting Directorate, Office of the Assistant Inspector General for Auditing, DoD.

F. Jay Lane
James L. Kornides
Timothy F. Soltis
Scott K. Miller
John R. Williams
Deborah Curry
Karen M. Bennett

INTERNET DOCUMENT INFORMATION FORM

A . Report Title: Inventory Record Accuracy and Management Controls at the Defense Logistics Agency Distribution Depots

B. DATE Report Downloaded From the Internet: 10/07/99

C. Report's Point of Contact: (Name, Organization, Address, Office Symbol, & Ph #): OAIG-AUD (ATTN: AFTS Audit Suggestions)
Inspector General, Department of Defense
400 Army Navy Drive (Room 801)
Arlington, VA 22202-2884

D. Currently Applicable Classification Level: Unclassified

E. Distribution Statement A: Approved for Public Release

F. The foregoing information was compiled and provided by:
DTIC-OCA, Initials: __VM__ Preparation Date 10/07/99

The foregoing information should exactly correspond to the Title, Report Number, and the Date on the accompanying report document. If there are mismatches, or other questions, contact the above OCA Representative for resolution.